Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A display device for displaying video data comprising:

a display module; and

a correction circuit for receiving a gradation signal ~~input~~ of said video data, generating a correction signal for correcting luminance based on a relationship defined by an (N-1)-th frame ~~input~~ gradation signal and an N-th frame ~~input~~ gradation signal which is received, for correcting said N-th frame ~~input~~ gradation signal using said correction signal, and for outputting said corrected N-th frame ~~input~~ gradation signal to said display module~~, and~~;

wherein said correction circuit generates said correction signal to add a luminance that enables cancellation of a luminance deficit caused by a response delay in said display module if a gradation level of said N-th frame gradation signal is greater than a gradation level of said (N-1)-th frame gradation signal;

wherein said correction circuit generates said correction signal to subtract a luminance that enables cancellation of a luminance surplus caused by a response delay in said display module if said gradation level of said N-th frame gradation signal is less than said gradation level of said (N-1)-th frame gradation signal;

wherein a target luminance which is represented on said display module based on ~~of~~ said corrected N-th frame ~~input~~ gradation signal overshoots ~~or undershoots~~ a luminance to be represented on said display module based on a non-corrected ~~of said~~ N-th frame ~~input~~ gradation signal ~~within one frame interval~~ if said

gradation level of said N-th frame gradation signal is greater than said gradation level of said (N-1)-th frame gradation signal; and

wherein said target luminance which is represented on said display module based on said corrected N-th frame gradation signal undershoots said luminance to be represented on said display module based on said non-corrected N-th frame gradation signal if said gradation level of said N-th frame gradation signal is less than said gradation level of said (N-l)-th frame gradation signal.

2. (currently amended) A liquid crystal module for displaying video data comprising:

a liquid crystal panel on which a plurality of image elements is formed; and

a correction circuit for receiving a gradation signal ~~input~~ of said video data and for increasing a gradation level of an N-th frame input gradation signal ~~level~~ of said gradation signal based on a relationship defined by an (N-1)-th frame ~~input~~ gradation signal and said N-th frame ~~input~~ gradation signal if a gradation level of said N-th frame ~~input~~ gradation signal is greater than a gradation level of said (N-1)-th frame ~~input~~ gradation signal;

a data driver for generating a write ~~potential~~ voltage based on said increased N-th frame ~~input~~ gradation signal, and for applying said ~~potential~~ voltage to an image element; and

a scan driver for selecting said image element to which said write ~~potential~~ voltage is applied~~, and~~;

wherein said correction circuit increases said gradation level of said N-th frame gradation signal to add a luminance that enables cancellation of a luminance deficit caused by a response delay in said liquid crystal panel if said gradation level

of said N-th frame gradation signal is greater than said gradation level of said (N-1)-th frame gradation signal; and

a wherein target luminance which is represented on said liquid crystal panel based on ~~of~~ said increased gradation level of said N-th frame ~~input~~ gradation signal overshoots a luminance to be represented on said liquid crystal panel based on a non-increased ~~of said~~ gradation level of said N-th frame ~~input~~ gradation signal ~~within one frame interval~~ if said gradation level of N-th frame gradation signal is greater than said gradation level of said (N-1)-th frame gradation signal.

3. (Currently Amended) A liquid crystal module for displaying video data comprising:

a liquid crystal panel on which a plurality of image elements is formed;

a correction circuit for receiving a gradation signal ~~input~~ of said video data and for decreasing a gradation level of an N-th frame ~~input~~ gradation signal ~~level~~ of said gradation signal based on a relationship defined by an (N-1)-th frame ~~input~~ gradation signal and said N-th frame ~~input~~ gradation signal if a gradation level of said N-th frame ~~input~~ gradation signal is less than a gradation level of said (N-1)-th frame ~~input~~ gradation signal;

a data driver for generating a write ~~potential~~ voltage based on said decreased N-th frame ~~input~~ gradation signal, and for applying said write ~~potential~~ voltage to an image element; and

a scan driver for selecting said image element to which said write ~~potential~~ voltage is applied~~,~~;

wherein said correction circuit decreases said gradation level of said N-th frame gradation signal to subtract a luminance that enables cancellation of a luminance surplus caused by a response delay in said liquid crystal panel if said

gradation level of said N-th frame gradation signal is less than said gradation level of said (N-1)-th frame gradation signal; and

wherein a target luminance which is represented on said liquid crystal panel based on ~~of~~ said decreased gradation level of said N-th frame ~~input~~ gradation signal undershoots a luminance to be represented on said liquid crystal panel based on a non-decreased ~~of said~~ gradation level of said N-th frame ~~input~~ gradation signal ~~within one frame interval~~ if said gradation level of N-th frame gradation signal is less than said gradation level of said (N-1)-th frame gradation signal.

4. (Currently Amended): A liquid crystal module for displaying video data comprising:

a liquid crystal panel on which a plurality of image elements is formed; and

a correction circuit for receiving ~~an input~~ a gradation signal for an immediately preceding frame from said video data and ~~an input~~ a gradation signal for a current frame ~~from~~ of said video signal, for generating a correction signal which raises a luminance of said current frame ~~input~~ gradation signal more than a luminance of said preceding frame ~~input~~ gradation signal if a gradation level of said current frame input gradation signal is greater than a gradation level of said preceding frame ~~input~~ gradation signal, for generating a correction signal which lowers a luminance of said current frame ~~input~~ gradation signal more than luminance of said preceding frame ~~input~~ gradation signal if said gradation level of said current frame ~~input~~ gradation signal is less than said gradation level of said preceding frame ~~input~~ gradation signal, and for correcting said current frame ~~input~~ gradation signal using said correction signal~~,~~;

wherein said correction circuit generates said correction signal to add a luminance that enables cancellation of a luminance deficit caused by a response delay in said liquid crystal panel if said gradation level of said current frame gradation signal is greater than said gradation level of said preceding frame gradation signal;

wherein said correction circuit generates said correction signal to subtract a luminance that enables cancellation of a luminance surplus caused by a response delay in said liquid crystal panel if said gradation level of said current frame gradation signal is less than said gradation level of said preceding frame gradation signal;

wherein a target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected current frame ~~input~~ gradation signal overshoots said luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said current frame ~~input~~ gradation signal ~~within one frame interval~~ if said gradation level of said current frame ~~input~~ gradation signal is greater than said gradation level of said preceding frame input gradation signal~~,~~; ~~or~~ and

wherein said target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected current frame ~~input~~ gradation signal undershoots said luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said current frame ~~input~~ gradation signal ~~within one frame interval~~ if said gradation level of said current frame ~~input~~ gradation signal is less than said gradation level of said preceding frame ~~input~~ gradation signal.

Claim 5 (canceled)

6. (Currently Amended) A liquid crystal module according to claim 4, wherein said correction circuit comprises:

a frame storage module for generating said preceding frame ~~input~~ gradation signal by storing at least ~~an input~~ said gradation signal from said immediately preceding frame;

a correction signal generating module for generating said correction signal based on said current frame ~~input~~ gradation signal and said preceding frame ~~input~~ gradation signal; and

an adder/subtracter for adding and subtracting said correction signal and said current frame ~~input~~ gradation signal.

7. (Currently Amended) A liquid crystal module according to claim 4, wherein said correction circuit generates said correction signal by linearizing the relationship between said correction signal and a gradation change determined from said preceding frame ~~input~~ gradation signal and said current frame ~~input~~ gradation signal and by applying weighting to said linearized relationship based on a polarity of said gradation change.

8. (currently amended) A liquid crystal module according to claim ~~5~~ 4, wherein said correction circuit generates said correction signal so that a compensation rate for luminance deficits or surpluses in said correction signal is within a range of -30% to 10% for intermediate gradations in three-frame intervals.

9. (Currently Amended) A liquid crystal module according to claim 6, wherein said correction circuit comprises:

an edge enhancement module for receiving said correction signal from said correction signal generating module and enhancing edges in an image displayed on said liquid crystal panel; and

~~an~~ another adder/subtracter for adding and subtracting an enhanced correction signal generated by said edge enhancement module and said current frame ~~input~~ gradation signal ~~received by way of said input module~~.

10. (Currently Amended): A liquid crystal module according to claim 6, wherein said correction signal generating module generates said correction signal based on a frame frequency of said liquid crystal panel, a liquid crystal response-time constant of said liquid crystal panel, and a change between said preceding frame input gradation signal and said current frame ~~input~~ gradation signal.

11. (Currently Amended) A system comprising:

an information processing device reading video data from media on which images are stored and outputting said video data as a gradation signal; and

a liquid crystal display device which comprises ~~including~~ a liquid crystal panel on which a matrix of a plurality of image elements is formed, and a correction circuit for receiving ~~an input~~ a gradation signal for an immediately preceding frame ~~from~~ of said video data and ~~an input~~ a gradation signal for a current frame from said video signal, for generating a correction signal which raises a luminance of said current frame ~~input~~ gradation signal more than a luminance of said preceding frame ~~input~~ gradation signal if a gradation level of said current frame ~~input~~ gradation signal is greater than a gradation level of said preceding frame ~~input~~ gradation signal, for generating a correction signal which lowers a luminance of said current frame ~~input~~

gradation signal more than luminance of said preceding frame ~~input~~ gradation signal if said gradation level of said current frame ~~input~~ gradation signal is less than said gradation level of said preceding frame ~~input~~ gradation signal, and for correcting said current frame ~~input~~ gradation signal using said correction signal~~,~~; and

wherein said correction circuit generates said correcting signal to add a luminance that enables cancellation of a luminance deficit caused by a response delay in said liquid crystal panel if said gradation level of said current frame gradation signal is greater than said gradation level of said preceding frame gradation signal;

wherein said correction circuit generates said correction signal to subtract luminance that enables cancellation of a luminance surplus caused by a response delay in said liquid crystal panel if said gradation level of said current frame gradation signal is less than said gradation level of said preceding frame gradation signal;

wherein a target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected current frame ~~input~~ gradation signal overshoots said luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said current frame ~~input~~ gradation signal ~~within one frame interval~~ if said gradation level of said current frame ~~input~~ gradation signal is greater than said gradation level of said preceding frame ~~input~~ gradation signal;~~,~~ ~~or~~ and

wherein said target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected current frame ~~input~~ gradation signal undershoots said luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said current frame ~~input~~ gradation signal ~~within one frame interval~~ if said

gradation level of said current frame ~~input~~ gradation signal is less than said gradation level of said preceding frame ~~input~~ gradation signal.

12. (Currently Amended): A method for driving a liquid crystal display device, comprising the steps of:

receiving ~~an input~~ a gradation signal from an immediately preceding frame and ~~an input~~ a gradation signal from a current frame;

generating a correction signal which raises a luminance of said current frame ~~input~~ gradation signal more than a luminance of said preceding frame ~~input~~ gradation signal if a gradation level of said current frame ~~input~~ gradation signal is greater than a gradation level of said preceding frame ~~input~~ gradation signal, or alternatively, generating a correction signal which lowers a luminance of said current frame ~~input~~ gradation signal more than a luminance of said preceding frame ~~input~~ gradation signal if said gradation level of said current frame ~~input~~ gradation signal is less than said gradation level of said preceding frame ~~input~~ gradation signal; and

correcting said current frame input gradation signal using said correction signal~~.~~;

wherein said generating step generates said correction signal to add a luminance that enables cancellation of a luminance deficit caused by a response delay in a liquid crystal panel if said gradation level of said current frame gradation signal is greater than said gradation level of said preceding frame gradation signal;

wherein said generating step generates said correction signal to subtract a luminance that enables cancellation of a luminance surplus caused by a response delay in said liquid crystal panel if said gradation level of said current frame

gradation signal is less than said gradation level of said preceding frame gradation signal;

wherein a target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected current frame ~~input~~ gradation signal overshoots said luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said current frame ~~input~~ gradation signal ~~within one frame interval~~ if said gradation level of said current frame ~~input~~ gradation signal is greater than said gradation level of said preceding frame ~~input~~ gradation signal;~~,~~ ~~or~~ and

wherein said target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected current frame ~~input~~ gradation signal undershoots said luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said current frame ~~input~~ gradation signal ~~within one frame interval~~ if said gradation level of said current frame ~~input~~ gradation signal is less than said gradation level of said preceding frame ~~input~~ gradation signal.

13. (Currently Amended) A liquid crystal module for displaying video data comprising:

a liquid crystal panel controlling a transparency of a liquid crystal interposed between image element electrodes and facing electrodes in response to a write ~~potential~~ voltage applied to said image element electrodes;

a timing control substrate equipped with a control circuit and a power supply circuit supplying power, said control circuit receiving and converting a video signal and a sync signal or a control signal, into a signal for said liquid crystal panel;

a scan substrate equipped with a scan driver circuit for supplying a selection ~~potential~~ voltage to said image element electrodes, via scan signal lines, based on a signal output from said timing control substrate; and

a data substrate equipped with a data driver circuit for supplying said write ~~potential~~ voltage to said image element electrodes, via data signal lines;

wherein said timing control substrate further includes a correction circuit for receiving ~~an input~~ a gradation signal of video data, for generating a correction signal to increase luminance if a post-change gradation level of said ~~input~~ gradation signal is greater than a pre-change gradation level of said ~~input~~ gradation signal or for generating a correction signal to reduce luminance if said post-change gradation level of said ~~input~~ gradation signal is less than said pre-change gradation level of said input gradation signal, and for correcting said post-change ~~input~~ gradation signal using said correction signal~~,~~;

wherein said correction circuit generates said correction signal to add a luminance that enables cancellation of a luminance deficit caused by a response delay in said liquid crystal panel if said gradation level of said post-change frame gradation signal is greater than said gradation level of said pre-change frame gradation signal;

wherein said correction circuit generates said correction signal to subtract luminance that enables cancellation of a luminance surplus caused by a response delay in said liquid crystal panel if said gradation level of said post-change frame gradation signal is less than said gradation level of said pre-change frame gradation signal;

wherein a target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected post-change ~~input~~ gradation signal overshoots a

luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said post-change ~~input~~ gradation signal ~~within one frame interval~~ if said post-change gradation level of said ~~input~~ gradation signal is greater than said pre-change gradation level of said ~~input~~ gradation signal~~,~~; ~~or~~ and

wherein said target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected post-change ~~input~~ gradation signal undershoots a luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ ~~said~~ post-change ~~input~~ gradation signal ~~within one frame interval~~ if said post-change gradation level of said ~~input~~ gradation signal is less than said pre-change gradation level of said ~~input~~ gradation signal.

14. (Currently Amended) A liquid crystal module according to claim 13, wherein said correction circuit generates said correction signal based on a correction data table that pre-defines correction levels of said correction signal based on said gradation level of said post-change ~~input~~ gradation signal and said gradation level of said pre-change ~~input~~ gradation signal, and wherein said correction circuit generates correction levels of said correction signals not defined in said correction data table based on said correction signal correction levels predefined in said correction data table.

15. (previously presented) A liquid crystal module according to claim 14, wherein, in said correction circuit, said correction level of said correction signal that is not pre-defined is a correction level contained in a range of +/-20% of a correction data DL obtained using

$$DL = \begin{cases} if\ (TLE_{j+1} - TLE_j)(LS - TLS_i) + (TLS_{i+1} - TLS_i)(LE - TLE_{j+1}) \leq 0: \\ TDL_{i,j} + \dfrac{TDL_{i+1,j} - TDL_{i,j}}{TLS_{i+1} - TLS_i}(LS - TLS_i) + \dfrac{TDL_{i,j+1} - TDL_{i,j}}{TLE_{j+1} - TLE_j}(LE - TLE_j) \\ else \\ TDL_{i+1,j+1} - \dfrac{TDL_{i+1,j+1} - TDL_{i,j+1}}{TLS_{i+1} - TLS_i}(TLS_{i+1} - LS) - \dfrac{TDL_{i+1,j+1} - TDL_{i+1,j}}{TLE_{j+1} - TLE_j}(TLE_{j+1} - LE) \end{cases}$$

(where DL represents correction data, i represents a pre-change gradation table index, j represents a post-change gradation table index, TLS represents pre-change gradation table, TLE represents post-change gradation table, TDL represents correction table data, LS represents pre-change gradation data (TLSi<=LS<TLSi+1, and LE represents post-change gradation table (TLEi<=LE<TLEi+1).

16. (Currently Amended) A liquid crystal module according to claim 13, wherein said correction circuit generates said correction signal based on a slope data table pre-defining correction levels of said correction signal based on a slope in a change from said pre-change ~~input~~ gradation signal gradation level to said post-change ~~input~~ gradation signal gradation level and said pre-change ~~input~~ gradation signal gradation level.

17. (Currently Amended) A liquid crystal module according to claim 16, wherein, in said correction circuit, a parameter γ representing the relation between said gradation levels and luminance is in a range of 1.8 – 2.2, a linear approximation with a bent-line graph is made of a relation between said slope of change and said correction level of said correction signal where a bend is positioned at an intermediate point between said pre-change gradation level of said ~~input~~ gradation

signal and a maximum gradation level if there is an increase in said gradation level, and, if there is a decrease in said gradation level, said correction signal correction level is a level contained in a range of +/-20% of a correction data DL obtained based on said slope data table and derived using

$$DL = \begin{cases} if\ LE < LS: M1_i(LE - LS) \\ else\,if\ LS \leq LE < \dfrac{LMAX + LS}{2}: M2_i(LE - LS) \\ else\,if\ LE \geq \dfrac{LMAX + LS}{2}: M2_i \dfrac{LMAX - LS}{2} - M3_i(LE - \dfrac{LMAX + LS}{2}) \end{cases}$$

(where DL represents correction data, i represents a line slope table index, M1 represents line slope table data (decreasing change), M2, M3 represents broken line slope table data (increasing change), LMAX represents maximum gradation data, LS represents pre-change gradation data, and LE represents post-change gradation data).

18. (Currently Amended) A liquid crystal module according to claim 16, wherein, in said correction circuit, a parameter γ representing the relation between said gradation levels and luminance is in a range of 1.8 - 2.2, a quadratic approximation is made of a relation between said slope of change and said correction level of said correction signal where a center line is positioned at an intermediate point between said pre-change gradation level of said ~~input~~ gradation signal and a maximum gradation level if there is an increase in said gradation level, and, if there is a

decrease in said gradation level, said correction signal correction level is a level contained in a range of +/-20% of a correction data DL obtained derived using

$$DL = \begin{cases} if\, LE < LS: A1_i(LE^2 - LS^2) \\ else\, if\, LS \leq LE: A2_i\{(LE - \frac{LS + LMAX}{2})^2 - (\frac{LS - LMAX}{2})^2\} \end{cases}$$

(where DL represents correction data, i represents a quadratic coefficient table index, A1 represents quadratic coefficient table data (decreasing change), A2 represents quadratic coefficient table data (increasing change), LMAX represents maximum gradation data, LS represents pre-change gradation data, and LE represents post-change gradation data) and based on a quadratic coefficient data table determined by said pre-change gradation level and obtained by approximating a relation between said slope of change and said correction signal correction level with a quadratic function having a center line at a line at a minimum gradation level.

19. (previously presented) A liquid crystal module a according to claim 13, wherein, in said correction circuit, said correction signal correction level is a level contained in a range of +/-20% of a correction data DL obtained based on a filter coefficient and a transfer function of a finite impulse filter and derived using

$$H(z) = 1 + K(1 - z)$$

$$K = \frac{\alpha\tau}{T_f}$$

(where H(z) represents a transfer function, K represents a filter coefficient, Tf represents one frame interval, τ represents a response-time constant, and alpha represents a correction coefficient).

20. (previously presented) A liquid crystal module according to claim 13, wherein said correction circuit includes a selection switch for selecting based on optical response characteristics or gradation signal optical characteristics of said liquid crystal.

21. (previously presented) A liquid crystal module according to claim 13, wherein said correction circuit includes a selection circuit for selecting a degree of correction.

22. (previously presented) A liquid crystal module according to claim 13, wherein said correction circuit generates a correction signal providing compensation so that a luminance deficit or surplus rate from said correction signal is in a range of -30% to 10% for intermediate gradations in three-frame intervals.

23. (previously presented) A liquid crystal module according to claim 13, wherein, said correction circuit includes an edge enhancement module enhancing edges of images displayed on said liquid crystal panel, said edge enhancement module receiving correction data from said data correction module and enhancing edges.

24. (currently amended) A liquid crystal module for displaying video data comprising:

a liquid crystal panel including image element electrodes formed as a matrix on a glass substrate, scan signal lines transferring a selection ~~potential~~ voltage to

select image element electrodes to which write ~~potentials~~ voltages are to be applied, data signal lines transferring write ~~potentials~~ voltages based on a video gradation signal to said image element electrodes, and thin-film transistors controlling whether said write ~~potential~~ voltage is to be applied to an image element electrode selected by a selection ~~potential~~ voltage for an intersection between said scan signal lines and said data signal lines, said liquid crystal panel applying said write ~~potential~~ voltage to said liquid crystal interposed between said image element electrodes and said facing electrodes and controlling transparency ~~during a frame interval~~ using a retention capacity applied between said image electrodes and facing electrodes to retain said write ~~potential~~ voltage;

a timing control substrate equipped with a control circuit and a power supply circuit supplying power, said control circuit receiving and converting a video signal and a sync signal or a control signal, into a signal for said liquid crystal panel;

a scan substrate equipped with a scan driver circuit for supplying a selection ~~potential~~ voltage to said image element electrodes, via scan signal lines, based on a signal output from said timing control substrate; ~~and~~

a data substrate equipped with a data driver circuit for supplying said write ~~potential~~ voltage to said image element electrodes, via data signal lines; and

a backlight for supplying light to said liquid crystal panel;

wherein said timing control substrate further includes a correction circuit for receiving ~~an input~~ a gradation signal of video data, for generating a correction signal to increase luminance if a post-change gradation level of said ~~input~~ gradation signal is greater than a pre-change gradation level of said ~~input~~ gradation signal or for generating a correction signal to reduce luminance if said post-change gradation level of said ~~input~~ gradation signal is less than said pre-change gradation level of

said input gradation signal, and for correcting said post-change ~~input~~ gradation signal using said correction signal;~~, and~~

wherein said generating step generates said correction signal to add a luminance that enables cancellation of a luminance deficit caused by a response delay in a liquid crystal panel if a gradation level of a current frame gradation signal is greater than a gradation level of a preceding frame gradation signal;

wherein said generating step generates said correction signal to subtract a luminance that enables cancellation of a luminance surplus caused by a response delay in said liquid crystal panel if said gradation level of said current frame gradation signal is less than said gradation level of said preceding frame gradation signal;

wherein a target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected post-change ~~input~~ gradation signal overshoots a luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said post-change ~~input~~ gradation signal ~~within one frame interval~~ if said post-change gradation level of said ~~input~~ gradation signal is greater than said pre-change gradation level of said ~~input~~ gradation signal~~,~~; ~~or~~ and

wherein said target luminance which is represented on said liquid crystal panel based on ~~of~~ said corrected post-change ~~input~~ gradation signal undershoots a luminance to be represented on said liquid crystal panel based on a non-corrected ~~of~~ said post-change input gradation signal ~~within one frame interval~~ if said post-change gradation level of said ~~input~~ gradation signal is less than said pre-change gradation level of said ~~input~~ gradation signal.